

MS4 General Permit
City of New Britain, 2017 Annual Report
Existing MS4 Permittee
Permit Number GSM 000064
[January 1, 2017 – December 31, 2017]

This report documents the City of New Britain’s efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2017 to December 31, 2017.

Part I: Summary of Minimum Control Measure Activities

1. Public Education and Outreach (Section 6 (a)(1) / page 19)

1.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
1-1 Implement public education and outreach	In progress / Ongoing	The City provided a section on “Stormwater Management in Connecticut” on measures to take to help reduce pollution and improve water quality in its annual Water Quality Report	Develop and implement public education program	DPW	Jul 1, 2018	Jul 1, 2018	Public education and outreach program to be finalized by July 1, 2018.
1-2 Address education/ outreach for pollutants of concern*	In progress / Ongoing	The City provided a section on “Stormwater Management in Connecticut” on measures to take to help reduce pollution and improve water quality in its annual Water Quality Report	Identify pollutants and incorporate into BMP 1-1	DPW	Jul 1, 2018	Jul 1, 2018	Public education and outreach program to be finalized by July 1, 2018.

1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.

Expand the public education program to include additional website information. Explore the feasibility of doing a direct mailing flyer with water bills once per year. Continue outreach program as detailed under Minimum Measure 2, including plant tours and public speaking engagements.

1.3 Details of activities implemented to educate the community on stormwater

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
Publish section on "Stormwater Management in Connecticut" on measures to take to help reduce pollution and improve water quality in its annual Water Quality Report. This is mailed annually to all people on City water.	Residents and businesses (approx. 70,000)	Proper car care, material storage and disposal, fertilizer usage, pet waste collection, car washing, septic system maintenance, illicit discharges, disconnected impervious area, water conservation.	Phosphorus, nitrogen, bacteria	DPW

2. Public Involvement/Participation (Section 6(a)(2) / page 21)

2.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Comply with public notice requirements for the Stormwater Management Plan	Complete	New Britain published the public notice online on April 1, 2017.	Publish SMP and issue public notice requesting comments	DPW	Apr 3, 2017	Apr 1, 2017	The SMP remains available online, along with additional information on the MS4 permit. To date, no comments have been received.
2-2 Comply with public notice requirements for Annual Reports	Complete / Ongoing	New Britain published the annual report online on February 15, 2018.	Publish annual reports and issue public notice requesting comments	DPW	Feb 15, 2018	Feb 15, 2018	The annual report is available online for public comment.

2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

Continue to make the Stormwater Management Plan and Annual Report available online and for public comment. Continue to host periodic public outreach and participation events as time and schedule allows. Engagements are expected to include periodic public speaking engagements with a combination of topics that include stormwater, drinking water, and sewer, as well as school tours of the treatment plant, with a portion of the tour focused on stormwater.

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	Apr 1, 2017	http://www.newbritainct.gov/news/displaynews.htm?NewsID=253&TargetID=1
Availability of Annual Report announced to public	Yes	Feb 15, 2018	http://www.newbritainct.gov/news/displaynews.htm?NewsID=253&TargetID=1

3. Illicit Discharge Detection and Elimination (Section 6(a)(3) and Appendix B / page 22)

3.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
3-1 Develop written IDDE program	Complete / Ongoing	The City completed the written IDDE program in full compliance with permit requirements in 2017.	Develop and implement IDDE program	DPW	Jul 1, 2018	Apr 1, 2017	Compliance with the written program is ongoing.
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete / Ongoing	New Britain mapped all known and accessible outfalls throughout the city in 2016 and early 2017. Additional information, including manholes and pipe connectivity, were also included.	Complete and update mapping	DPW, Engineering	Jul 1, 2019	Apr 1, 2017	By early 2020, the City will add catch basins to the map to delineate catchment areas draining to each outfall. As more outfalls are located, they are added to the City's GIS database.
3-3 Implement citizen reporting program	Complete / Ongoing	The City established a utility called SeeClickFix that allows users from a website or mobile device to report an illicit discharge. New Britain also publishes a phone number in the annual Water Quality Report for citizens to report illegal activities.	Develop program and investigate citizen reports	DPW	Jul 1, 2017	Jul 1, 2017	Tracking of citizen complaints is ongoing. To date, none have been received.
3-4 Establish legal authority to prohibit illicit discharges	Complete / Ongoing	New Britain reviewed its IDDE bylaws and has determined that it has legal authority as required under the Permit.	Establish and enforce legal authority	DPW; Engineering, Licenses, Permits & Inspection	Jul 1, 2018	Jul 1, 2018	Illicit discharge enforcement is ongoing.
3-5 Develop record keeping system for IDDE tracking	Complete / Ongoing	The City developed an IDDE tracking database as part of its written IDDE program, completed in early 2017.	Develop and implement IDDE tracking system	DPW	Jul 1, 2017	Jul 1, 2017	Tracking of illicit discharges is ongoing.
3-6 Address IDDE in areas with pollutants of concern	In progress / Ongoing	New Britain is actively investigating illicit discharges through its program of dry and wet weather sampling.	Review impaired water guidance and track progress of BMPs for impaired waters	DPW	Not specified	Ongoing	Illicit discharge investigation is ongoing.
3-7 Outfall and interconnection dry weather screening and sampling	Complete	The City investigated all known and accessible outfalls to collect samples and perform other screening activities in 2016 during dry weather.	Develop and implement screening procedures	DPW	Varies	Apr 1, 2017	New Britain continued its program of investigating illicit discharges in areas where field investigations have indicated the potential for illicit discharges.

3.1 BMP Summary (continued)

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
3-8 Sanitary Sewer Overflows (SSOs) Inventory	Complete / Ongoing	New Britain created an SSO inventory of all known overflows dating back to 2012 as part of its SMP. Information was updated to reflect events of the past year.	Create SSO inventory and report new SSOs	DPW	Oct 29, 2017	Apr 1, 2017	SSO inventory update and investigations are ongoing.

3.2 Describe any IDDE activities planned for the next year, if applicable.

The City will expand its SeeClickFix utility to provide more information to users in order to make illicit discharge reporting easier. Anticipated improvements include better drop-down menus and information on various types of illicit discharges.

As part of an agreement with CT DEEP, the City has a 3-year plan in place to investigate areas with indications of illicit discharges. These investigations are ongoing. The City also plans to continue select wet weather sampling as funding allows.

Many other items are ongoing, such as illicit discharge investigations, bylaw enforcement, infrastructure mapping, SSO and IDDE inventorying and tracking, etc.

3.3 List of citizen reports of suspected illicit discharges received during this reporting period.

Date of Report	Location / suspected source	Response taken
None received		

3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period using the following table.

Location (Lat long/ street crossing /address and receiving water)	Date and duration of occurrence	Discharge to MS4 or surface water	Estimated volume discharged	Known or suspected cause / Responsible party	Corrective measures planned and completed (include dates)	Sampling data (if applicable)
See attached table						

3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.

The City uses an Illicit Discharge Tracking Form as part of its IDDE Plan, completed in 2017. This form in part documents the location, cause, description of the event, and corrective actions taken. Information is recorded in an electronic database that in part tracks illicit discharge reports, locations, and response efforts. New Britain updates the database as reports come in and follow-up actions are performed. This information is the responsibility of the Deputy Director of Public Works, Utility Division and Superintendent of Water and Sewer.

3.6 Provide a summary of actions taken to address septic failures using the table below.

Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known
N/A – The City received no public complaints and no plans for repair of failed septic systems during the previous year.		

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	Approx. 290 (271 located to date)
Estimated or actual number of interconnections	#
Outfall mapping complete	95%
Interconnection mapping complete	(%)
System-wide mapping complete (detailed MS4 infrastructure)	80%
Outfall assessment and priority ranking	95%
Dry weather screening of all High and Low priority outfalls complete	95%
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	0%

3.8 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often is it given (minimum once per year).

IDDE training is conducted annually for employees involved in the IDDE program. Training generally includes the following topics: information on how to identify illicit discharges and SSOs; impacts from fats, oils, and greases; pollution in the environment and waterways; and employee roles within the framework of the IDDE program. IDDE training is performed concurrent with Good Housekeeping measures outlined under BMP 6-1.

4. Construction Site Runoff Control (Section 6(a)(4) / page 25)

4.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	In progress / Ongoing	The City has begun to review existing regulations to confirm legal authority or areas where modifications are required.	Establish and enforce legal authority	Engineering; Licenses, Permits & Inspection	Jul 1, 2019	Jul 1, 2019	Existing regulations were enforced during this reporting period, and will continue to be enforced until updated as required to meet permit requirements.
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Complete	A plan was developed to coordinate between departments on site plan review and approval.	Develop and implement coordination plan	Licenses, Permits & Inspection	Jul 1, 2017	Jul 1, 2017	Departments coordinate as needed to complete site plan review as noted under BMP 4-3.
4-3 Review site plans for stormwater quality concerns	Complete / Ongoing	Site plans were reviewed for all development and redevelopment projects with soil disturbance greater than 1 acre. The City conducted 41 site plan reviews, of which 4 had soil disturbance greater than 1 acre.	Perform site plan reviews	Engineering; Licenses, Permits & Inspection	Jul 1, 2017	Jul 1, 2017	New Britain also provides developers with a checklist as noted under BMP 4-6 that in part addresses stormwater controls to minimize impacts to water quality.
4-4 Conduct site inspections	Complete / Ongoing	Site inspections were performed for all development and redevelopment projects with soil disturbance greater than 1 acre. The City inspected 4 development projects with soil disturbance greater than 1 acre.	Perform site inspections	Licenses, Permits & Inspections	Jul 1, 2017	Jul 1, 2017	The Building Inspector conducts formal site inspections that in part address construction and post-construction stormwater control measures such as erosion and sediment controls. Additional informal inspections are conducted during routine site visits.

4.1 BMP Summary (continued)

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-5 Implement procedure to allow public comment on site development	Complete / Ongoing	The City established procedures for receipt and consideration of information submitted by the public.	Develop and implement public comment period	Licenses, Permits & Inspections	Jul 1, 2017	Jul 1, 2017	Information may be submitted via a web link under the Department of Public Works webpage. See item 4.2 below for additional information.
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Complete / Ongoing	New Britain developed a checklist that is provided to developers, with one item addressing DEEP's construction stormwater permit.	Develop and implement notification procedure	Engineering, Licenses, Permits & Inspections	Jul 1, 2017	Jul 1, 2017	All developers are provided the checklist when filing for a permit.

4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.

The City will continue to determine required land use regulatory updates that will be required during future permit years.

The City will continue to post a list of Site Plan Applications with soil disturbance greater than 1 acres as received by the Building Department on its dedicated Stormwater Management website, available at http://www.newbritainct.gov/services/public_works/programs_n_services/stormwater_management.htm. Users are instructed to contact the Building Department for information or to comment on any applications as required by BMP 4-5.

Additional items are ongoing, such as site plan review, site inspections, and outreach to developers.

5. Post-construction Stormwater Management (Section 6(a)(5) / page 27)

5.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	In progress / ongoing	Continued to enforce current regulations.	Evaluate and develop guidelines	Engineering; Licenses, Permits & Inspection	Jul 1, 2021	Jul 1, 2021	No progress to date on new regulations. Existing regulations were enforced during this reporting period.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	In progress / ongoing	Continued to enforce current regulations.	Enforce regulations	Engineering; Licenses, Permits & Inspection	Jul 1, 2019	Jul 1, 2019	No progress to date on new regulations. Existing regulations were enforced during this reporting period.
5-3 Implement long-term maintenance plan for stormwater basins and treatment structures in priority areas	Not started	No progress.	Inventory applicable retention and detention ponds and develop and implement long-term maintenance plan	DPW, Engineering	Jul 1, 2019	Jul 1, 2019	No progress to date.
5-4 DCIA mapping	In progress / ongoing	The City began to determine the methodology for tracking DCIA as part of ongoing development projects.	Develop and update DCIA mapping and calculation	Engineering	Jul 1, 2020	Jul 1, 2020	See item 5.4 below for additional information.
5-5 Address post-construction issues in areas with pollutants of concern	Not started	No progress.	Identify projects in catchments that discharge to impaired waters	Engineering	Not specified	To be determined	No progress to date.

5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.

New Britain will begin work on updating LID regulations, retention and detention pond inventory, and developing a long-term maintenance plan for stormwater basins and treatment structures as per the requirements of BMPs 5-2, 5-3, and 5-4 above.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	acres
DCIA disconnected (redevelopment plus retrofits)	acres this year / acres total
Retrofits completed	#
DCIA disconnected	% this year / % total since 2012
Estimated cost of retrofits	\$
Detention or retention ponds identified	# this year /# total

5.4 Briefly describe the method to be used to determine baseline DCIA.

Due to historic development throughout the City, New Britain has substantial impervious area. As the City has an extensive GIS database of land use, we intend to track impervious area changes through this system. As development projects are submitted to various departments, the City will require developers to provide an index of both existing impervious area (connected and disconnected) and proposed impervious area (connected and disconnected) for each parcel impacted by development or redevelopment. The definition of DCIA will be consistent with permit requirements and based on retaining a portion of the Water Quality Volume. DCIA is based on an existing baseline map using 2012 data obtained from CT DEEP. This information will be incorporated into the City's GIS system and tracked on an annual basis. As DCIA is tracked during subsequent years, this tracking methodology may be updated based on results of the program.

6. Pollution Prevention/Good Housekeeping (Section 6(a)(6) / page 31)

6.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-1 Develop/implement formal employee training program	Complete / Ongoing	The City continued its training program established under the previous permit.	Perform annual employee training	DPW	Jul 1, 2017	Jul 1, 2017	Good housekeeping training is performed concurrently with IDDE training as outlined in Section 3.8.
6-2 Implement MS4 property and operations maintenance	Not started	No progress.	Develop and implement maintenance procedures	DPW	Jul 1, 2018	Jul 1, 2018	No progress to date.
6-3 Implement coordination with interconnected MS4s	Complete / Ongoing	New Britain has reached out to two interconnected MS4s to coordinate on outfall and catchment investigations.	Identify MS4s and attend coordination meetings	DPW	Not specified	Ongoing	Other MS4s contacted include ConnDOT and the Central Connecticut State University.
6-4 Develop/implement program to control other sources of pollutants to the MS4	In progress	The City is developing a plan based on ongoing water quality testing in conjunction with BMP 6-5.	Develop and implement pollutant source control program	DPW, Engineering	Not specified	Ongoing	As water quality testing is performed during subsequent years, the plan will continue to be refined to prioritize areas for further investigation.
6-5 Evaluate additional measures for discharges to impaired waters*	In progress	The City is developing a plan based on ongoing water quality testing in conjunction with BMP 6-4.	Develop and implement measures for discharges to impaired waters	DPW	Not specified	Ongoing	As water quality testing is performed during subsequent years, the plan will continue to be refined to prioritize areas for further investigation.
6-6 Track projects that disconnect DCIA	Complete / In progress	New Britain has developed a DCIA tracking methodology as outlined in Section 5.4.	Track DCIA percentage	Engineering	Jul 1, 2017	Jul 1, 2017	DCIA tracking is ongoing.
6-7 Implement infrastructure repair/rehab program	Not started	No progress.	Evaluate, develop, and implement infrastructure program	DPW	Jul 1, 2021	Jul 1, 2021	No progress to date.
6-8 Develop/implement plan to identify/prioritize retrofit projects	Not started	No progress.	Develop retrofit plan / implement plan to remove 1% of DCIA annually	Engineering	Jul 1, 2020 / Jul 1, 2022	Jul 1, 2020 / Jul 1, 2022	No progress to date.

6.1 BMP Summary (continued)

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-9 Develop/implement street sweeping program	Complete / Ongoing	The City continued implementing its street sweeping program.	Perform annual street sweeping	DPW	Jul 1, 2017	Jul 1, 2017	The program generally includes sweeping all streets at least once annually, with heavily trafficked roads swept more often.
6-10 Develop/implement catch basin cleaning program	Complete / Ongoing	The City continued implementing its catch basin cleaning program.	Develop and implement catch basin cleaning and inspection procedures	DPW	Jul 1, 2020	Jul 1, 2017	Catch basin cleaning and other data is documented in an asset management software program. Updates are made continuously based on field information.
6-11 Develop/implement snow management practices	In progress	New Britain has started to document snow management practices.	Develop and implement snow management	DPW	Jul 1, 2018	Jul 1, 2018	Snow management practices and procedures will be finalized by July 1, 2018.

6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.

New Britain will review its existing training program and make changes to address additional permitting requirements pertaining to good housekeeping and IDDE, where applicable.

The City will complete an Operation and Maintenance Plan by July 1, 2018 as required and outlined under BMP 6-2. This will also include a section on snow management practices as outlined under BMP 6-12.

The catch basin and street sweeping programs will continue to be implemented during the next year, with refinements made as applicable.

Many other items are ongoing, including catch basin cleaning, street sweeping, winter operations, and water quality testing.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	Yes, 11/14/2017
Street sweeping	
Curb miles swept	527 miles
Volume (or mass) of material collected	260.25 tons
Catch basin cleaning	
Total catch basins in priority areas	
Total catch basins in MS4	3,590
Catch basins inspected	600
Catch basins cleaned	600
Volume (or mass) of material removed from all catch basins	28,800 cubic feet
Volume removed from catch basins to impaired waters (if known)	
Snow management	
Type(s) of deicing material used	Treated salt
Total amount of each deicing material applied	4,317 tons
Type(s) of deicing equipment used	
Lane-miles treated	10,816 miles
Snow disposal location	
Staff training provided on application methods & equipment	Yes, 11/14/2017
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	32%
Reduction in turf area (since start of permit)	11.44 acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	\$

6.4 Catch basin cleaning program

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule. [Complete this section for the 2017 Annual Report only]

New Britain tracks all catch basin cleaning activities individually by address in an asset management spreadsheet on a continuous basis. Information documented includes the structure location/address, date of cleaning, approximate depth of sediment, water accumulation, and additional comments such as any required follow-up maintenance. This method has allowed the City to prioritize more frequent cleaning activities for basins subject to higher sediment accumulation rates, as well as document year-end results. Additional catch basin repairs or replacements are tracked separately in a similar manner. The City cleaned approximately 600 catch basins and replaced an additional 38 during the previous calendar year.

6.5 Retrofit program

Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project. [\[Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.\]](#)

Not yet available

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [\[Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.\]](#)

Not yet available

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years. [\[Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.\]](#)

Not yet available

Part II: Impaired waters investigation and monitoring [\[This section required beginning with 2018 Annual Report\]](#)

Note: this section to be updated and provided for the 2018 annual report, due April 1, 2019. Template section has been removed.

Part III: Additional IDDE Program Data [\[This section required beginning with 2018 Annual Report\]](#)

Note: this section to be updated and provided for the 2018 annual report, due April 1, 2019. Template section has been removed.

Part IV: Certification

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.”

Chief Elected Official or Principal Executive Officer	Document Prepared by
Print name:	Print name:
Signature / Date:	Signature / Date: